

Date: Wednesday, 07/01/2009 1:36:38 PM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : ARM
 Job Number : 44472
 Estimate Number : 12882
 P.O. Number :
 This Issue : 07/01/2009 S.O. No. :
 Prsht Rev. : NC Part Number : D3560042
 First Issue : / / Type : MACHINED PARTS Drawing Number : D3560 REV D
 Previous Run : 42369 Project Number : N/A
 Material :
 Due Date : 23/01/2009 Qty: 8 Um: Each
 Written By : *[Signature]*
 Checked & Approved By :
 Comment : Est Rev:A New Issue 07.05.24 EC
 est rev B ECN 987 07.10.09 EC verified by: DD
 Est Rev:C ECN1048 07-12-18 DD verified by: EC

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M6061T6B0500X05000 6061-T6 Bar .500 x 5.00



Comment: Qty.: 1.4648 f(s)/Unit Total: 11.7180 f(s)
 6061-T6 Bar 0.50" x 5.00"
 Batch: 110550

28 09/01/21

2.0 BAND SAW BAND SAW



Comment: BAND SAW
 Cut blanks 16.750" long

28 09/01/21

3.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

1- Mill as per Folio FA694 Rev: *AD* & Dwg D3560 Rev: *D*

2-C'sink 0.196" hole on manual mill as per dwg D3560

3-Deburr per dwg D3560

PTO →

28 09/01/21

4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE


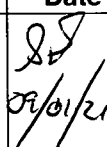


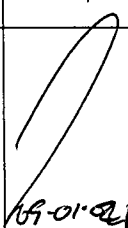


Comment: INSPECT PARTS AS THEY COME OFF MACHINE

28 09/01/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3560-042 PAR #: NA Fault Category: Prod / mechanical parts NCR: (Yes) No DQA: DD Date: 09/02/06
 Resolution: SCRAP Disposition: SCRAP QA: N/C Closed: DD Date: 09/02/04

NCR: <u>44472</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/01/21	3.0	One part move in the jib when roughing cycle. operator R.C. Homan then forget to tight the two bolt.	 09/01/21	Scrap destroyed & <u>Replace # A110550</u>	 09/01/21	 09-01-30	 09/01/21	 09-01-21

NOTE: Date & initial all entries

Date: Wednesday, 07/01/2009 1:36:38 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ARM

Job Number: 44472

Part Number: D3560042

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

JL 09/01/26

6.0

D35921

Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

PLATE

344066

JL 09.01.30 8

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld assembly as per dwg D3560

STEP:

- 1- clean material (buff bracket and bottom of arm with blue pad)
- 2- set up bracket and arm on jig
- 3- preheat bracket and arm with torch
- 4- clean before welding with brush
- 5- set up machine to 135 amps
- 6- weld across bottom and top ends
- 7- reheat with torch (65 deg C)
- 8- on one side weld from bottom to top half way
- 9- same for other side (half way)
- 10- from half way point weld the rest of the first side (ease off pedal near end)
- 11- same for remaining side (ease off pedal near end)

710

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09.01.30 8

9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

09/01/30 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3560-042 PAR #: N/A Fault Category: Prod/Fms. Large NCR: Yes No DQA: 15 Date: 09/02/06
 Resolution: re-work Disposition: re-work QA: N/C Closed: 12 Date: 05/02/11

NCR: <u>44472</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09.01.29	7	WELD CRACKED DURING WELDING PROCESS. ON ONE STEP ARM. (2 steps) R.C. Process	#	ZIP CUT CRACK TO REMOVE AND RE-WELD PER OSI COT <u>M/D 8037 Rod</u>	# 08.01.29	 05.01.30	# 09.01.29	 05.01.30

NOTE: Date & initial all entries

Date: Wednesday, 07/01/2009 1:36:38 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ARM

Job Number: 44472

Part Number: D3560042

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



(8)

Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

FL 09/02/02

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

09-02-02 (S)

12.0

D2808

Bushing



Comment: Qty.: 1.0000 Each(s)/Unit Total: 8.0000 Each(s)

Spacer

B37113

(7a)

341708

(12)

09/02/03

13.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Press bushing in D3560 arm per dwg D3562

09/02/03 (8)

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09/02/03 (8)

15.0

PACKAGING 1

PACKAGING RESOURCE #1



(8)

Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: Steven

9/2/03

50

16.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/02/04

Job Completion



mk
09-02-03

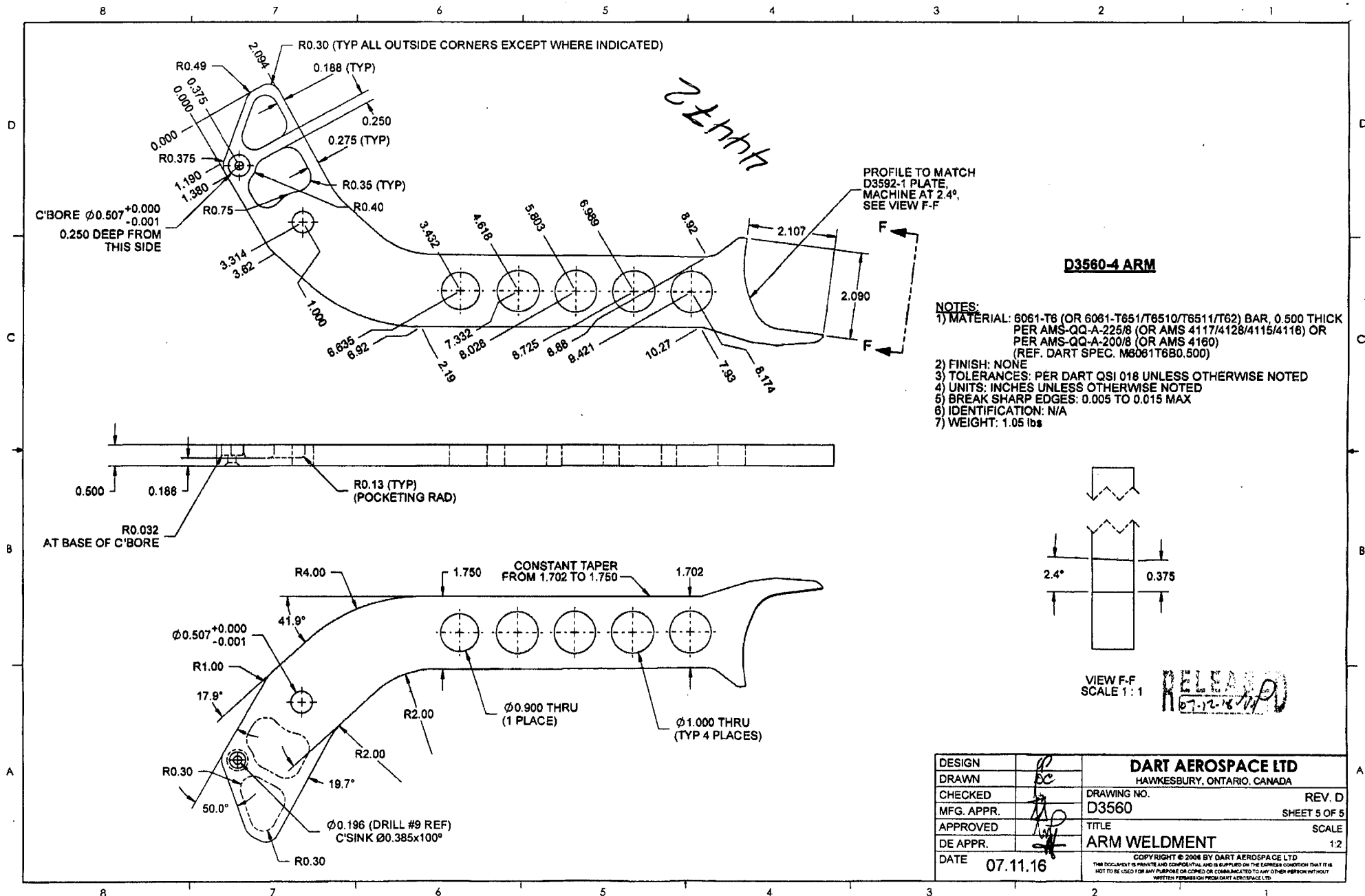
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN		DART AEROSPACE LTD	
DRAWN	bc	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D3560	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		ARM WELDMENT	1:2
DATE	07.11.16	COPYRIGHT © 2006 BY DART AEROSPACE LTD	
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DART AEROSPACE LTD		Work Order:	44472
Description: Arm		Part Number:	D3560-2
Inspection Dwg: D3560 Rev: B		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

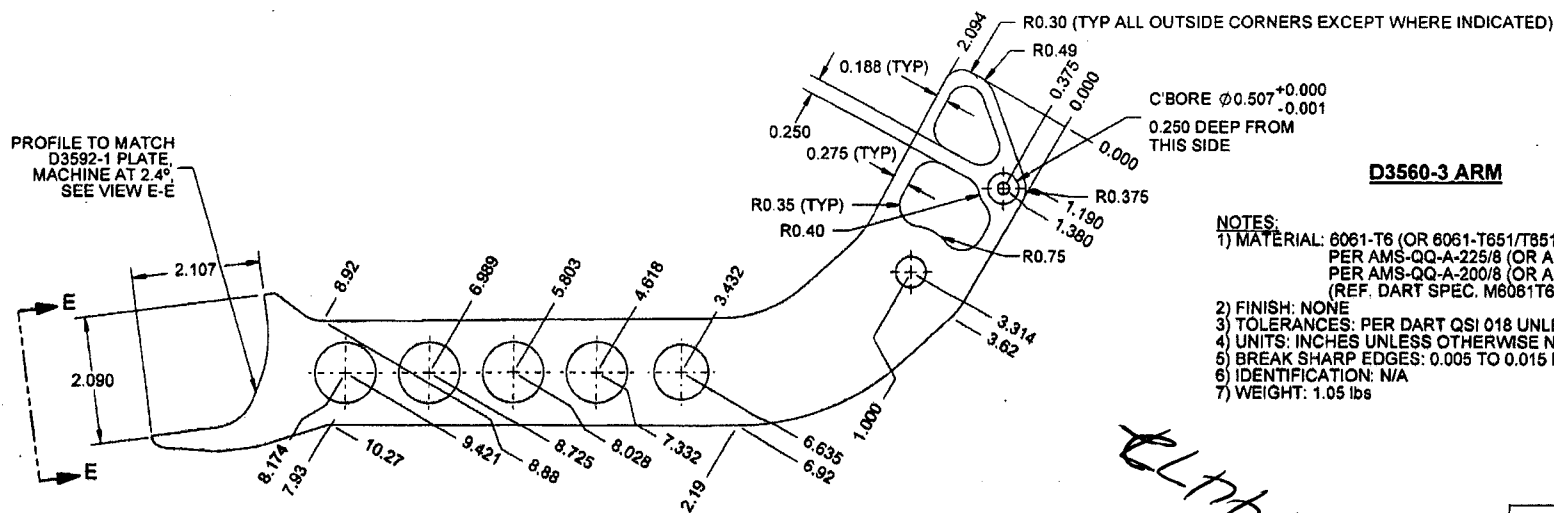
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.507	+0.000/-0.001	.506	✓			
Ø0.196	+0.005/-0.001	.197	✓			
Ø1.000	+0.010/-0.001	1.003	✓			
0.500	+/-0.010	.504	✓			
0.250	+/-0.010	.253	✓			
0.275	+/-0.010	.278	✓			
0.188	+/-0.010	.191	✓			
2.000	+/-0.010	2.005	✓			
1.700	+/-0.010	1.705	✓			
Ø0.385 x 100°	+/-0.010 x 0.5°	.385 x 100°	✓			
0.250 Deep	+/-0.010	.247	✓			

Measured by: SP	Audited by: JL	Prototype Approval:	N/A
Date: 09/01/21	Date: 09/01/26	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.01.17	New Issue	KJ/JLM	
B	07.06.13	Dimensions updated per Dwg Rev B	KJ/JLM	BE

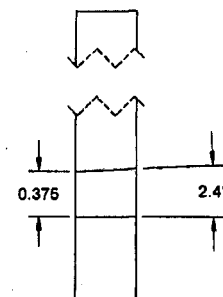
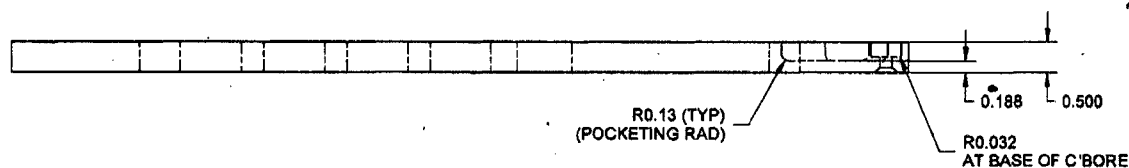
PROFILE TO MATCH
D3592-1 PLATE
MACHINE AT 2.4°
SEE VIEW E-E



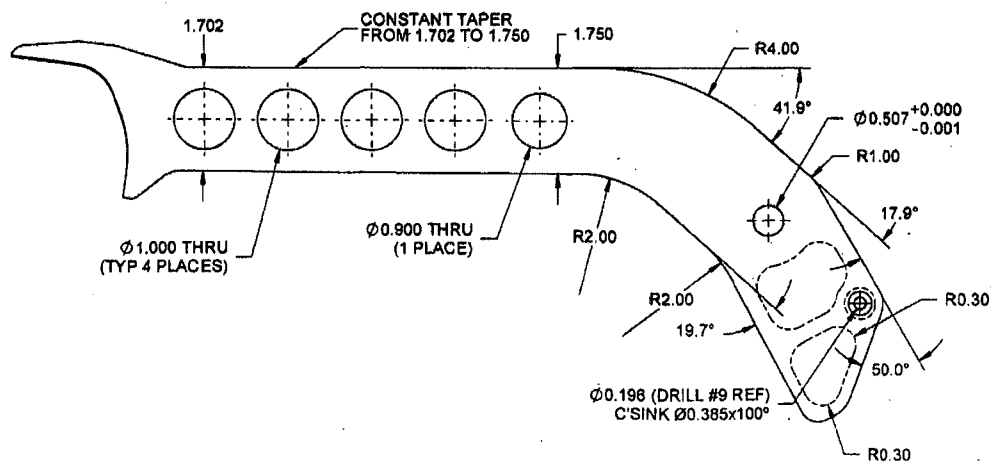
D3560-3 ARM

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR, 0.500 THICK
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4180)
(REF. DART SPEC. M6081T680.500)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.05 lbs

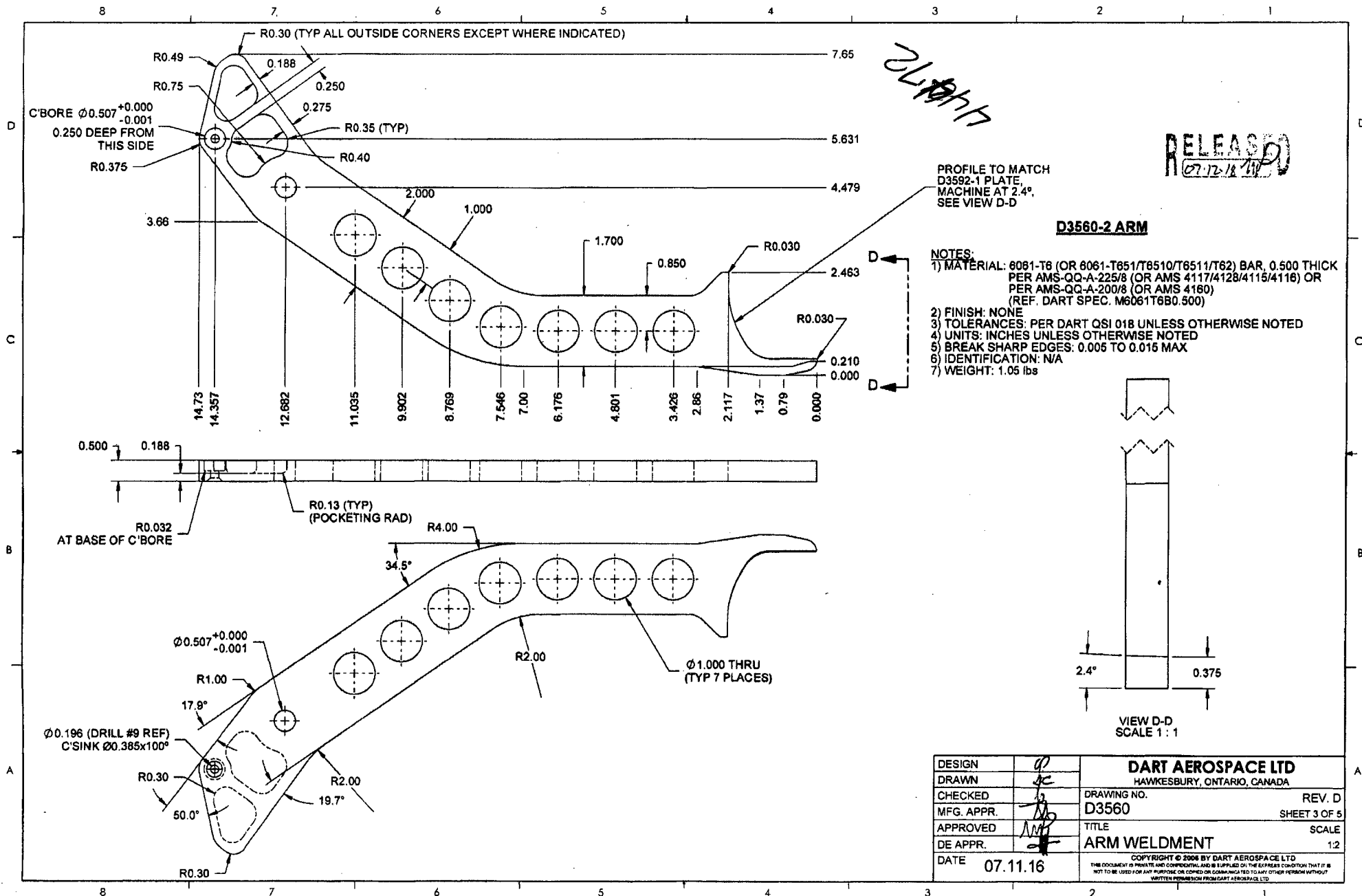


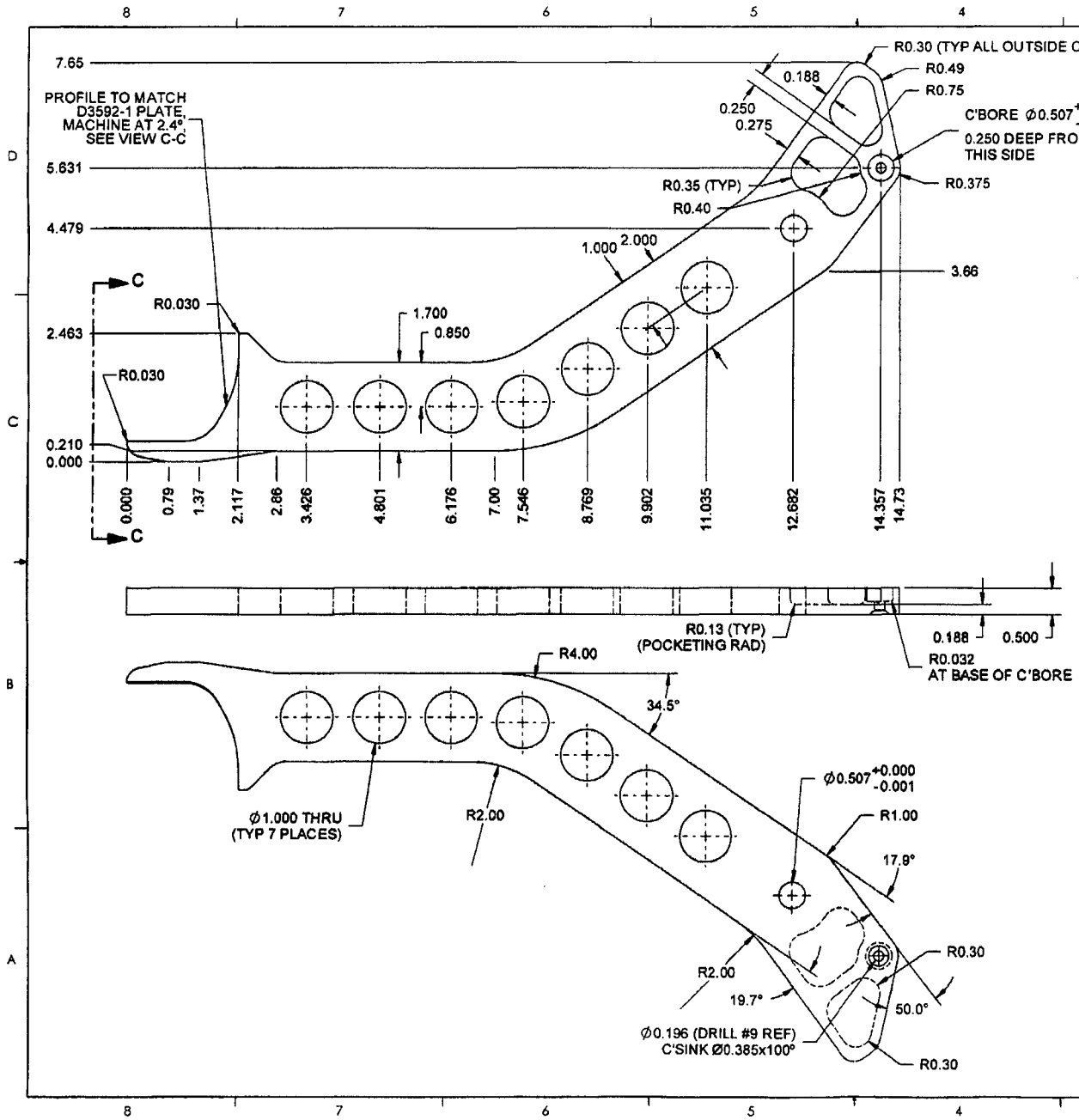
VIEW E-E
SCALE 1:1



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MFG. APPR.	MP	D3560	SHEET 4 OF 5
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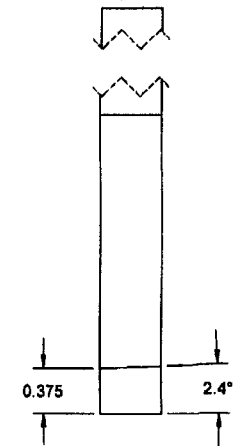
RELEASED
07.12.16





D3560-1 ARM WELDMENT

- NOTES:
- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR, 0.500 THICK
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B0.500)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 1.05 lbs

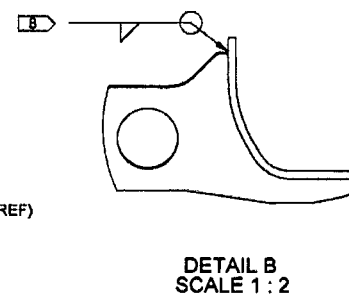
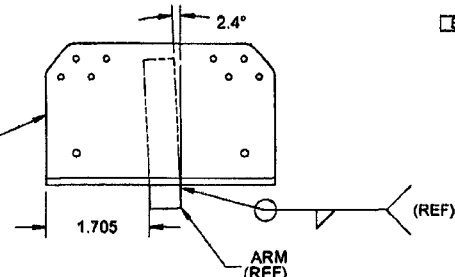
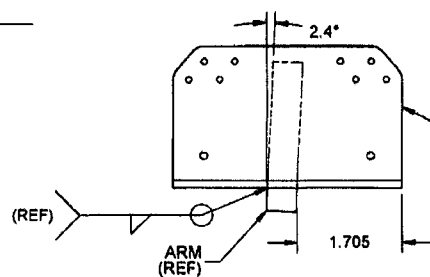
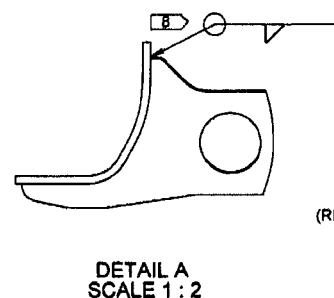
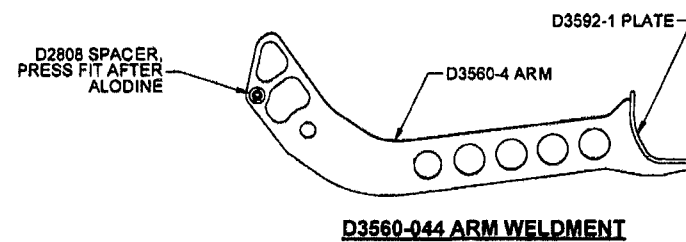
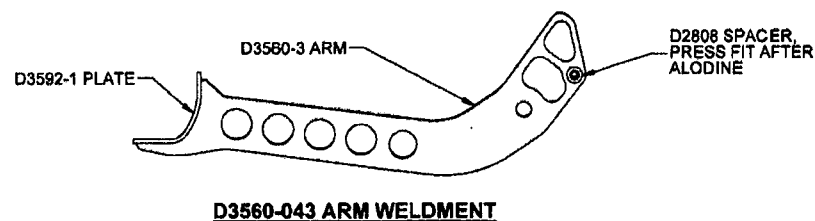
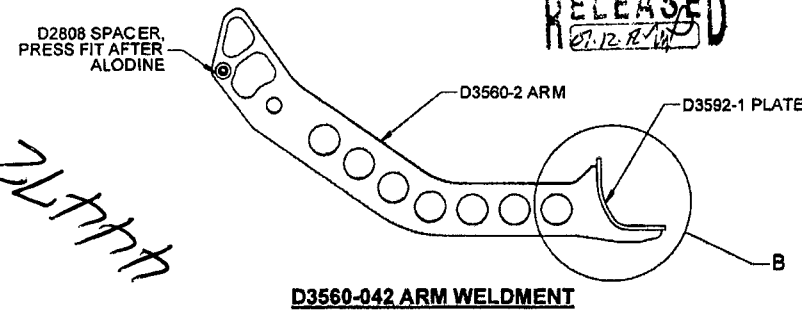
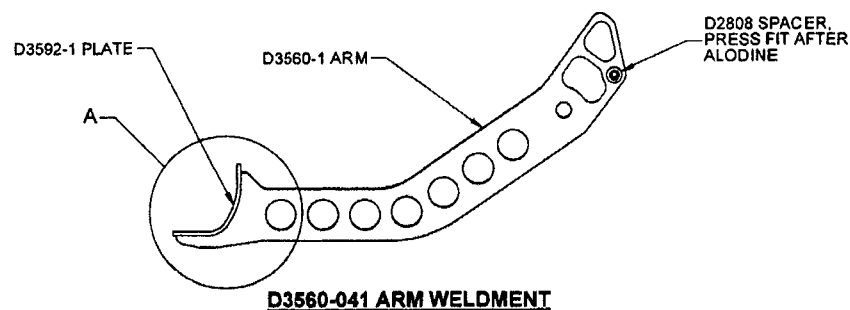


VIEW C-C
SCALE 1:1

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07.12.16

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PARTS LIST

QTY -041	QTY -042	QTY -043	QTY -044	P/N	DESCRIPTION
X				D3560-041	ARM WELDMENT
	X			D3560-042	ARM WELDMENT
		X		D3560-043	ARM WELDMENT
			X	D3560-044	ARM WELDMENT
1	1	1	1	D2808	SPACER
1				D3560-1	ARM
	1			D3560-2	ARM
		1		D3560-3	ARM
			1	D3560-4	ARM
1	1	1	1	D3592-1	PLATE

D	ADD D2808 PRESS FIT NOTE; REDRAWN IN SOLIDWORKS	DC	07.11.16
C	REMOVE POWDER COAT	CP	07.06.10
B	REDESIGN AS WELDMENT, ADD POCKETS	CP	07.01.15
A	NEW ISSUE	CP	06.09.25
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO.	REV. D
CHECKED		D3560	SHEET 1 OF 5
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- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 1.23 lbs (TYP)
 - 8) WELDING: PER DART QSI 004